

ATTACHMENT TO INTERVIEW SUMMARY

In connection with the 103 rejection of claim 1 over Eberhard, Williams and LoSasso, Applicant requested further consideration of the following arguments: 1) LoSasso teaches use of a nonionic polyacrylamide not a cationic polyacrylamide as claimed.¹ 2) Dentel (per pages 7 – 8 of Applicant's response of 12/20/07) teaches away from use of a cationic polyacrylamide in combination with an inorganic salt.²

The Examiner and Applicant reviewed the scope of claim 1 and the examiner's Sec 103 rejection of claim 1 over Eberhard, Williams, and Lo Sasso.

After reviewing the references relied upon, the Examiner stated that Lo Sasso's use of the term "nonionic polyacrylamide" is intended to include polyacrylamides comprising up to 5 wt % cationic comonomers. See Lo Sasso col 2 line 64:

methacrylamide. It is also within the scope of this invention to use polyacrylamides containing up to about 5 percent of a cationic comonomer. Some useful cationic comonomers are the dialkyl diallyl ammonium chlorides and 2-hydroxy 3 methacryloxypropyl trimethyl ammonium chloride. The term "nonionic polyacrylamide" includes copolymers of acrylamide and up to about 5 percent by weight of a cationic comonomer. While higher levels of cationic comonomers are compatible with the ferric-containing salts, we prefer to use a nonionic polymer. The preferred comonomer is diacetone

¹ Applicant's response of 12/20/07, at page 8 of 18: "Further, Lo Sasso teaches the use of a non-ionic polyacrylamide which is specifically not taught or claimed by Applicant."

² Applicant's response of 12/20/07, at page 7 of 18: "Dentel, e.g. Steven K. Dentel, *Evaluation of Dual Chemical Conditioning and Dewatering of Aerobically Digested Biosolids*, August 18, 1996, . . . teaches away from the use of an iron salt coagulant in combination with a flocculant to dewater biological sludge." Applicant's response of 12/20/07, at page 8 of 18: "[T]he Dentel reference . . . teaches NOT to use a salt of iron with a cationic polyacrylamide in the dewatering of bio-solids."

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Therefore, Lo Sasso describes a cationic polyacrylamide. Applicant responded that industry usage of the term “nonionic” polymer is understood to mean a polymer having a small amount of charge, whether cationic or anionic. The examiner replied that there is no evidence of such industry knowledge of record. Furthermore, that addition to the record of such a fact, if shown, would not be permitted after final rejection. Citation of prior art supporting such allegations of facts could be made of record in an IDS filed with an RCE (Request for Continued Examination). The examiner did not comment whether such a showing would overcome this rejection. Parenthetically, the examiner stated that had applicant defined what he meant by “cationic polymer” in the application as originally filed, say, by stating that the term “cationic polymer” meant a polymer having at least x % cationic charge, or the like, the problem may not have arisen.

As for Applicant’s second argument that Dentel teaches away from using a cationic polyacrylamide in combination with an inorganic salt, the examiner first noted that neither of the two Dentel references cited by applicant at pages 7 – 8 appears to be of record.³ For that reason alone, the “teaching away” argument is not persuasive. To the extent, however, that the reference Applicant refers to as Dentel, “*Evaluation of Dual*

³ Applicant cites

1) Steven K. Dentel, *Evaluation of Dual Chemical Conditioning and Dewatering of Aerobically Digested Biosolids*, August 18, 1996, and

2) Dentel, *Evaluation of Dual Chemical Conditioning and Dewatering of Anaerobically Digested Biosolids*, June 1995

whereas the reference of record is:

Chitikela and Dentel, *Evaluation of Dual Chemical Conditioning and Dewatering of Anaerobically Digested Biosolids*, WEF, 10th Annual Residuals & Biosolids Management Conference: 10 Years of a Look Toward the Future, 1996, 11-24 through 11-33.

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Chemical Conditioning and Dewatering of Aerobically Digested Biosolids, August 18, 1996," describes substantially the same content as Chitikela (of record), the examiner notes that Chitikela does not teach away from the combination of Eberhard and Lo Sasso because Chitikela does not teach away from using an inorganic salt in combination with a cationic polyacrylamide. To the contrary, Chitikela at Fig 2 (page 11-31) describes the best dewatering performance (shortest Capillary Suction Time, or CST) as accomplished using a combination of first adding ferric chloride followed by addition of PERCOL 757, a cationic polyacrylamide (see middle of page 11-26), to a biological sludge, albeit not a *thermophilic* digested biosludge. See Fig 2 for "O -- O" 3.0 g/L ferric chloride" data.

/Chester T. Barry/

Primary Examiner, Art Unit 1797